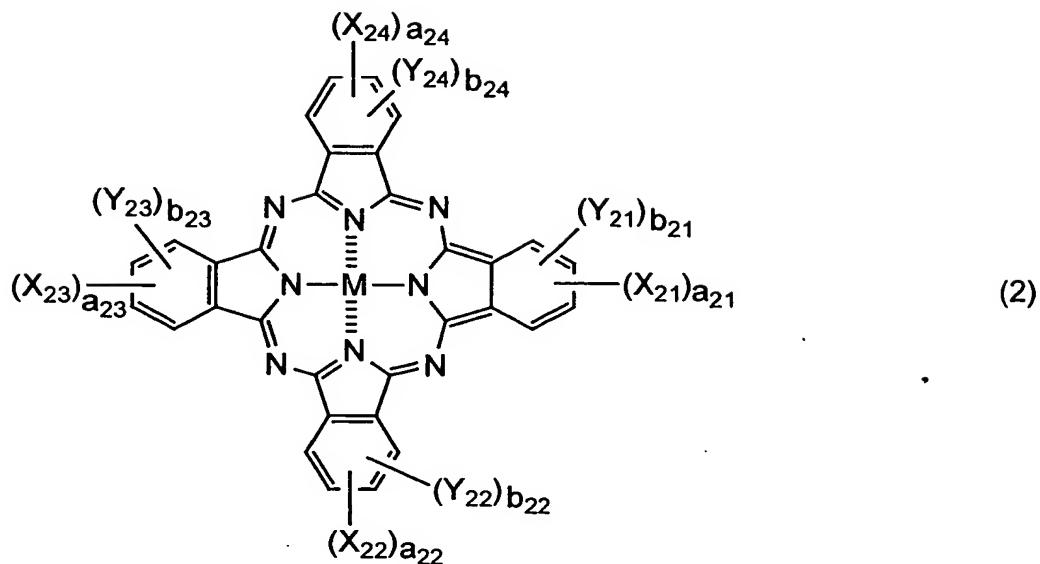


**what is claimed is:**

1. An ink for inkjet comprising an aqueous medium, at least one of dyes represented by the following formulae (1) to (4) dissolved or dispersed in the aqueous medium, and at least one of alkylene diols where one alkylene group has at least 3 carbon atoms or their homologues dissolved or dispersed in the aqueous medium:



wherein  $A_{11}$  and  $B_{11}$  each independently represent an optionally-substituted heterocyclic group;  $n$  is an integer selected from 1 and 2;  $L$  represents a substituent bonding to  $A_{11}$  or  $B_{11}$  at any desired position; when  $n$  is 1,  $L$  represents a hydrogen atom or a monovalent substituent; and when  $n$  is 2,  $L$  represents a single bond or a divalent linking group;

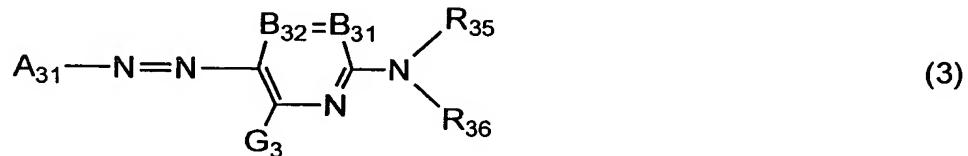


wherein  $X_{21}$ ,  $X_{22}$ ,  $X_{23}$  and  $X_{24}$  each independently represent  $-SO-Z_2$ ,  $-SO_2-Z_2$ ,  $-SO_2NR_{21}R_{22}$ , a sulfo group,  $-CONR_{21}R_{22}$ , or  $-CO_2R_{21}$ ;  $Z_2$  independently represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted cycloalkyl group, a substituted or unsubstituted alkenyl group, a substituted or unsubstituted aralkyl group, a substituted or unsubstituted aryl group, or a substituted or unsubstituted heterocyclic group;  $R_{21}$  and  $R_{22}$  each independently represent a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted cycloalkyl group, a substituted or unsubstituted alkenyl group, a substituted or unsubstituted aralkyl group, a substituted or unsubstituted aryl group, or a substituted or unsubstituted heterocyclic group;

$Y_{21}$ ,  $Y_{22}$ ,  $Y_{23}$  and  $Y_{24}$  each independently represent a monovalent substituent;

$a_{21}$  to  $a_{24}$ , and  $b_{21}$  to  $b_{24}$  indicate the number of the substituents of  $X_{21}$  to  $X_{24}$  and  $Y_{21}$  to  $Y_{24}$ , respectively;  $a_{21}$  to  $a_{24}$  each independently represent a number of from 0 to 4, but all of these are not 0 at the same time;  $b_{21}$  to  $b_{24}$  each independently represent a number of from 0 to 4; and when  $a_{21}$  to  $a_{24}$ , and  $b_{21}$  to  $b_{24}$  are a number of 2 or more, then plural  $X_{21}$ 's to  $X_{24}$ 's and  $Y_{21}$ 's to  $Y_{24}$ 's may be the same or different;

$M$  represents a hydrogen atom, a metal atom or its oxide, hydroxide or halide;



Wherein  $A_{31}$  represents a 5-membered hetero ring;  
 $B_{31}$  and  $B_{32}$  each represent  $=CR_{31}-$  or  $-CR_{32}=$ , or either one of them is a nitrogen atom and the other is  $=CR_{31}-$  or  $-CR_{32}=$ ;  
 $R_{35}$  and  $R_{36}$  each independently represent a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, an acyl group, an alkoxy carbonyl group, an aryloxycarbonyl group, a carbamoyl group, an alkyl or arylsulfonyl group, or a sulfamoyl group, and each group may be substituted;  
 $G_3$ ,  $R_{31}$  and  $R_{32}$  each independently represent a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, a carboxyl group, a carbamoyl group, an alkoxy carbonyl group, an aryloxycarbonyl

group, a heterocyclic-oxy carbonyl group, an acyl group, a hydroxyl group, an alkoxy group, an aryloxy group, a heterocyclic-oxy group, a silyloxy group, an acyloxy group, a carbamoyloxy group, an alkoxy carbonyloxy group, an aryloxy carbonyloxy group, an amino group, an acylamino group, an ureido group, a sulfamoylamino group, an alkoxy carbonylamino group, an aryloxy carbonylamino group, an alkyl or arylsulfonylamino group, a heterocyclic sulfonylamino group, a nitro group, an alkyl or arylthio group, an alkyl or arylsulfonyl group, a heterocyclic sulfonyl group, an alkyl or arylsulfinyl group, a heterocyclic sulfinyl group, a sulfamoyl group, a sulfo group, or a heterocyclic-thio group, and each group may be substituted;

$R_{31}$  and  $R_{35}$ , or  $R_{35}$  and  $R_{36}$  may bond to each other to form a 5- or 6-membered ring;



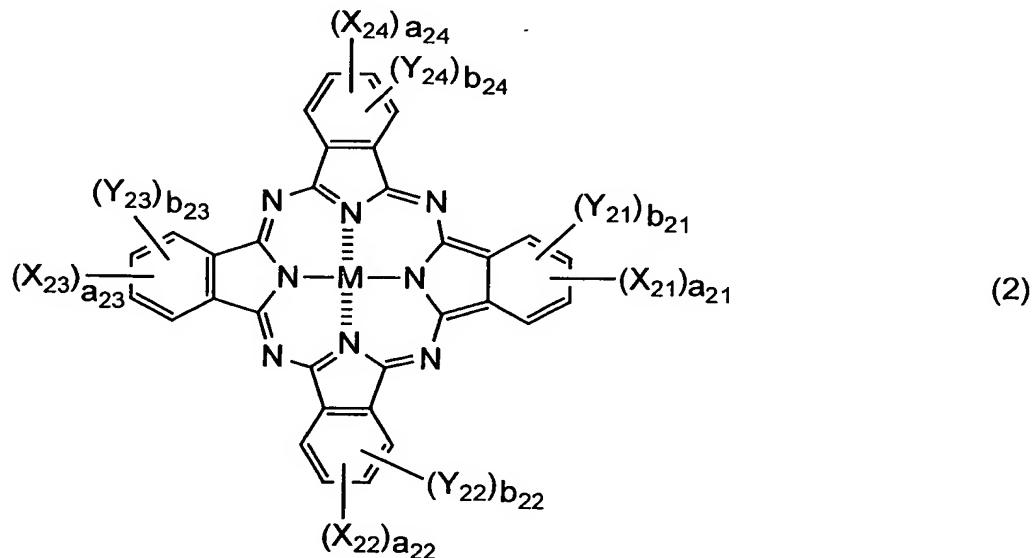
wherein  $A_{41}$ ,  $A_{42}$  and  $A_{43}$  each independently represent an optionally-substituted aromatic or heterocyclic group;  $A_{41}$  and  $A_{43}$  are monovalent group, and  $A_{42}$  is a divalent group.

2. An ink set for inkjet comprising at least one ink of claim 1.

3. An ink for inkjet comprising an aqueous medium, at least one of dyes represented by the following formulae (1) to (4) dissolved or dispersed in the aqueous medium, and at least one polymer compound dissolved or dispersed in the aqueous medium:



wherein  $A_{11}$  and  $B_{11}$  each independently represent an optionally-substituted heterocyclic group;  $n$  is an integer selected from 1 and 2;  $L$  represents a substituent bonding to  $A_{11}$  or  $B_{11}$  at any desired position; when  $n$  is 1,  $L$  represents a hydrogen atom or a monovalent substituent; and when  $n$  is 2,  $L$  represents a single bond or a divalent linking group;



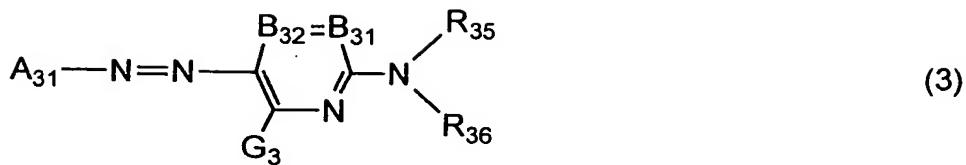
wherein  $X_{21}$ ,  $X_{22}$ ,  $X_{23}$  and  $X_{24}$  each independently represent  $-SO-Z_2$ ,

$-\text{SO}_2-\text{Z}_2$ ,  $-\text{SO}_2\text{NR}_{21}\text{R}_{22}$ , a sulfo group,  $-\text{CONR}_{21}\text{R}_{22}$ , or  $-\text{CO}_2\text{R}_{21}$ ;  $\text{Z}_2$  independently represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted cycloalkyl group, a substituted or unsubstituted alkenyl group, a substituted or unsubstituted aralkyl group, a substituted or unsubstituted aryl group, or a substituted or unsubstituted heterocyclic group;  $\text{R}_{21}$  and  $\text{R}_{22}$  each independently represent a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted cycloalkyl group, a substituted or unsubstituted alkenyl group, a substituted or unsubstituted aralkyl group, a substituted or unsubstituted aryl group, or a substituted or unsubstituted heterocyclic group;

$\text{Y}_{21}$ ,  $\text{Y}_{22}$ ,  $\text{Y}_{23}$  and  $\text{Y}_{24}$  each independently represent a monovalent substituent;

$\text{a}_{21}$  to  $\text{a}_{24}$ , and  $\text{b}_{21}$  to  $\text{b}_{24}$  indicate the number of the substituents of  $\text{X}_{21}$  to  $\text{X}_{24}$  and  $\text{Y}_{21}$  to  $\text{Y}_{24}$ , respectively;  $\text{a}_{21}$  to  $\text{a}_{24}$  each independently represent a number of from 0 to 4, but all of these are not 0 at the same time;  $\text{b}_{21}$  to  $\text{b}_{24}$  each independently represent a number of from 0 to 4; and when  $\text{a}_{21}$  to  $\text{a}_{24}$ , and  $\text{b}_{21}$  to  $\text{b}_{24}$  are a number of 2 or more, then plural  $\text{X}_{21}$ 's to  $\text{X}_{24}$ 's and  $\text{Y}_{21}$ 's to  $\text{Y}_{24}$ 's may be the same or different;

$\text{M}$  represents a hydrogen atom, a metal atom or its oxide, hydroxide or halide;



wherein  $A_{31}$  represents a 5-membered hetero ring;  
 $B_{31}$  and  $B_{32}$  each represent  $=CR_{31}-$  or  $-CR_{32}=$ , or either one of them is a nitrogen atom and the other is  $=CR_{31}-$  or  $-CR_{32}=$ ;  
 $R_{35}$  and  $R_{36}$  each independently represent a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, an acyl group, an alkoxy carbonyl group, an aryloxy carbonyl group, a carbamoyl group, an alkyl or arylsulfonyl group, or a sulfamoyl group, and each group may be substituted;  
 $G_3$ ,  $R_{31}$  and  $R_{32}$  each independently represent a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, a carboxyl group, a carbamoyl group, an alkoxy carbonyl group, an aryloxy carbonyl group, a heterocyclic-oxy carbonyl group, an acyl group, a hydroxyl group, an alkoxy group, an aryloxy group, a heterocyclic-oxy group, a silyloxy group, an acyloxy group, a carbamoyloxy group, an alkoxy carbonyloxy group, an aryloxy carbonyloxy group, an amino group, an acylamino group, an ureido group, a sulfamoylamino group, an alkoxy carbonylamino group, an aryloxy carbonylamino group, an alkyl or arylsulfonylamino group, a heterocyclic sulfonylamino group, a nitro group, an alkyl or arylthio group, an alkyl or arylsulfonyl group, a heterocyclic sulfonyl group,

an alkyl or arylsulfinyl group, a heterocyclic sulfinyl group, a sulfamoyl group, a sulfo group, or a heterocyclic-thio group, and each group may be substituted;

$R_{31}$  and  $R_{35}$ , or  $R_{35}$  and  $R_{36}$  may bond to each other to form a 5- or 6-membered ring;



Wherein  $A_{41}$ ,  $A_{42}$  and  $A_{43}$  each independently represent an optionally-substituted aromatic or heterocyclic group;  $A_{41}$  and  $A_{43}$  are monovalent group, and  $A_{42}$  is a divalent group.

4. The ink for inkjet as claimed in claim 3, wherein the at least one polymer compound is a latex dispersion.

5. The ink for inkjet as claimed in claim 3, wherein the at least one polymer compound is a water-soluble polymer.

6. The ink for inkjet as claimed in claim 3, wherein the at least one polymer compound has a cationic group.

7. An ink set for inkjet comprising at least one ink of any of claims 3 to 6.

8. An ink set for inkjet comprising at least a first

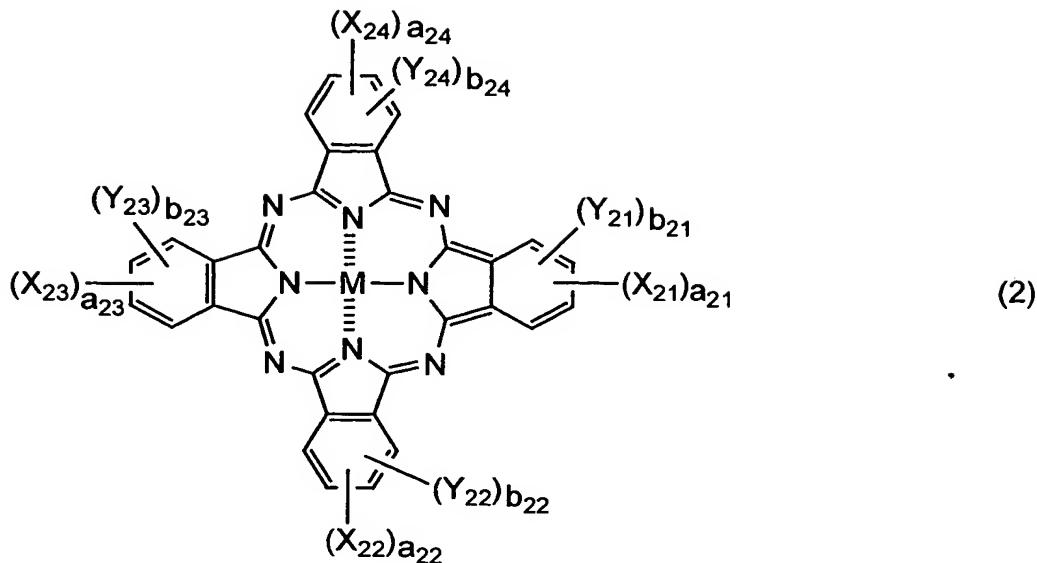
ink and a second ink, wherein

the first ink contains an aqueous medium and at least one of dyes represented by the following formulae (1) to (4) dissolved or dispersed in the aqueous medium, and

the second ink contains at least one compound capable of interacting with the at least one of dyes represented by the following formulae (1) to (4) dissolved or dispersed in the aqueous medium:



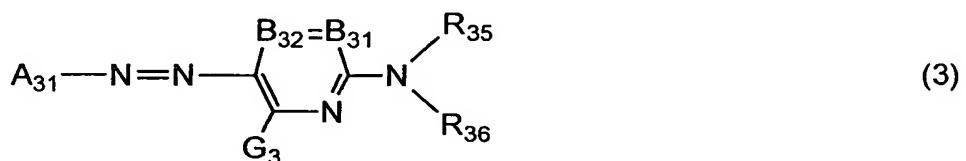
wherein  $A_{11}$  and  $B_{11}$  each independently represent an optionally-substituted heterocyclic group;  $n$  is an integer selected from 1 and 2;  $L$  represents a substituent bonding to  $A_{11}$  or  $B_{11}$  at any desired position; when  $n$  is 1,  $L$  represents a hydrogen atom or a monovalent substituent; and when  $n$  is 2,  $L$  represents a single bond or a divalent linking group;



wherein  $X_{21}$ ,  $X_{22}$ ,  $X_{23}$  and  $X_{24}$  each independently represent  $-SO-Z_2$ ,  $-SO_2-Z_2$ ,  $-SO_2NR_{21}R_{22}$ , a sulfo group,  $-CONR_{21}R_{22}$ , or  $-CO_2R_{21}$ ;  $Z_2$  independently represents a substituted or unsubstituted alkyl group, a substituted or unsubstituted cycloalkyl group, a substituted or unsubstituted alkenyl group, a substituted or unsubstituted aralkyl group, a substituted or unsubstituted aryl group, or a substituted or unsubstituted heterocyclic group;  $R_{21}$  and  $R_{22}$  each independently represent a hydrogen atom, a substituted or unsubstituted alkyl group, a substituted or unsubstituted cycloalkyl group, a substituted or unsubstituted alkenyl group, a substituted or unsubstituted aralkyl group, a substituted or unsubstituted aryl group, or a substituted or unsubstituted heterocyclic group;

$Y_{21}$ ,  $Y_{22}$ ,  $Y_{23}$  and  $Y_{24}$  each independently represent a monovalent substituent;

$a_{21}$  to  $a_{24}$ , and  $b_{21}$  to  $b_{24}$  indicate the number of the substituents of  $X_{21}$  to  $X_{24}$  and  $Y_{21}$  to  $Y_{24}$ , respectively;  $a_{21}$  to  $a_{24}$  each independently represent a number of from 0 to 4, but all of these are not 0 at the same time;  $b_{21}$  to  $b_{24}$  each independently represent a number of from 0 to 4; and when  $a_{21}$  to  $a_{24}$ , and  $b_{21}$  to  $b_{24}$  are a number of 2 or more, then plural  $X_{21}$ 's to  $X_{24}$ 's and  $Y_{21}$ 's to  $Y_{24}$ 's may be the same or different; M represents a hydrogen atom, a metal atom or its oxide, hydroxide or halide;



wherein  $A_{31}$  represents a 5-membered hetero ring;  
 $B_{31}$  and  $B_{32}$  each represent  $=CR_{31}-$  or  $-CR_{32}=$ , or either one of them is a nitrogen atom and the other is  $=CR_{31}-$  or  $-CR_{32}=$ ;  
 $R_{35}$  and  $R_{36}$  each independently represent a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, an acyl group, an alkoxy carbonyl group, an aryloxy carbonyl group, a carbamoyl group, an alkyl or arylsulfonyl group, or a sulfamoyl group, and each group may be substituted;  
 $G_3$ ,  $R_{31}$  and  $R_{32}$  each independently represent a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, a carboxyl group, a carbamoyl group, an alkoxy carbonyl group, an aryloxy carbonyl

group, a heterocyclic-oxycarbonyl group, an acyl group, a hydroxyl group, an alkoxy group, an aryloxy group, a heterocyclic-oxy group, a silyloxy group, an acyloxy group, a carbamoyloxy group, an alkoxy carbonyloxy group, an aryloxycarbonyloxy group, an amino group, an acylamino group, an ureido group, a sulfamoylamino group, an alkoxy carbonylamino group, an aryloxycarbonylamino group, an alkyl or arylsulfonylamino group, a heterocyclic sulfonylamino group, a nitro group, an alkyl or arylthio group, an alkyl or arylsulfonyl group, a heterocyclic sulfonyl group, an alkyl or arylsulfinyl group, a heterocyclic sulfinyl group, a sulfamoyl group, a sulfo group, or a heterocyclic-thio group, and each group may be substituted;

$R_{31}$  and  $R_{35}$ , or  $R_{35}$  and  $R_{36}$  may bond to each other to form a 5- or 6-membered ring;



wherein  $A_{41}$ ,  $A_{42}$  and  $A_{43}$  each independently represent an optionally-substituted aromatic or heterocyclic group;  $A_{41}$  and  $A_{43}$  are monovalent group, and  $A_{42}$  is a divalent group.

9. The ink set for inkjet as claimed in claim 8, wherein the compound capable of interacting with the dye is a polyvalent metal salt.

10. The ink set for inkjet as claimed in claim 8, wherein the compound capable of interacting with the dye is a polycationic compound.

11. An inkjet recording method with an ink set of any of claims 8 to 10 comprising a step of forming an image with the first ink and a step of applying the second ink onto the image.